

Appl No. 09/849,786
Amdt. dated June 10, 2005
Reply to Office action of March 11, 2005

REMARKS/ARGUMENTS

The Applicant acknowledges the receipt of the Office Action mailed March 11, 2005. Claims 1-2, 4-14, and 16-24 stand rejected. Claims 1 and 13 have been amended, claims 5, 8, 17 and 20 have been cancelled and claims 25-29 have been added. In addition, claims 11, 21 and 23 have been amended to change "radiofrequencies" to "radio frequencies." Reconsideration and allowance of claims 1, 2, 4, 6, 7, 9-14 16, 18-29, is respectfully requested. Accordingly, amended claims and supporting remarks are hereby presented that particularly point out and distinctly claim the subject matter that Applicant regards as his invention. No new matter is being added.

I. Rejection of claims 1-2, 4-5, 9-10, 13-14, 16-17, and 21-22 under 35 U.S.C. 102(e)

Independent claims 1 and 13 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,690,947 to Tom (hereafter Tom). For reasons that will now be set forth, claims 1 and 13, as currently amended, are not anticipated by Tom.

Claims 1 and 13, as currently amended, recite a communications module with a first section (a digital section) that is electrically coupled to an external host processor and a detachable second section (an RF section) that transmits and receives data via an antenna that is also electrically connected to the first section. Thus, the first section has one connector for electrically connecting to the host and a second connector for electrically connecting with the detachable second section.

By contrast, Tom, which is directed to a wireless communication system, includes a handset that is configured to receive removable cartridges, and in all of the embodiments disclosed in Tom, the cartridge has only one connector and that connector is for connecting with the handset.

In one embodiment (Fig. 3) of Tom, the removable cartridge includes the components of the digital section (control, DSP, RAM) and the RF section (RF/IF circuits) on one card. The card is a single card and does not have any detachable sections. Although the card is electrically connected to an external host processor (the handset), it does not have a detachable second section that is also electrically connected to the first section that sends/receives signals via an antenna. Similarly, Figure 13 shows an embodiment with the Antenna, RF/IF system, voice processing system, and microcontrollers all located on a single cartridge that does not have any

Appl No. 09/849,786
Amtd. dated June 10, 2005
Reply to Office action of March 11, 2005

detachable sections. Thus, although the card is electrically connected to an external host processor (the handset), it does not have a detachable second section that is also electrically connected to the first section that sends/receives signals via an antenna. Figure 15 illustrates an embodiment where the RF section (antenna and RF/IF) is located on the handset (*i.e.* with the host processor), not on a second section of the communications module that is detachable from the first section. In fact this embodiment teaches away from the present invention as an aspect of the present invention is that the RF section can be changed while using the same digital section – as opposed to the embodiment of Fig. 15 where the RF section is built-in (and thus can't be changed) and the digital section is interchangeable. Thus, none of these embodiments disclose a communications module with both a first (digital) section that is electrically coupled to a host and a second (RF) section that is detachable from the first section with mating electrical connectors for electrically connecting the first section with the second section. In all of these embodiments, the cartridge has only one connector and that is for connecting with the handset.

Claims 2, 4 and 9-10 are dependent claims of claim 1 and therefore contain each and every element of claim 1. Claims 14, 16 and 21-22 are dependent claims of claim 13 and therefore contain each and every element of claim 13. Therefore, for the reasons already set forth for claims 1 and 13, claims 2, 4, 9-10, 14, 16 and 21-22 are also allowable. Claims 5 and 17 have been cancelled.

II. Rejection of claims 6-8, 11-12, 18-20, and 23-24 under 35 U.S.C. 103(a)

Dependent claims 6-8, 11-12, 18-20, and 23-24 stand rejected under 35 U.S.C. 103(a) as being obvious based on the combination of Tom and in view of Applicant's Specification. Claims 8, 17, 20 and 23 have been cancelled. For reasons that will now be set forth, these claims are not obvious based on the combination of Tom and the Applicant's Specification.

As stated herein *supra*, Tom does not disclose a communications module with both a first (digital) section that is electrically coupled to a host and a second (RF) section that is detachable from the first section with mating electrical connectors for electrically connecting the first section with the second section. The aforementioned deficiencies in Tom are not remedied by any teaching in the Applicant's specification, which the examiner relies on to show a MAC and physical layer processing system, at least one memory device, a second connecting member for

Appl No. 09/849,786
Amdt. dated June 10, 2005
Reply to Office action of March 11, 2005

connecting the first section with a host processor, nor are those deficiencies remedied by those devices that the examiner takes Official Notice.

III. New claims 25-30

New independent claim 25 recites a communications module comprising a first housing for housing a digital section of the communications module and a second housing for housing an RF section of the communications module, the second housing detachable to the first section. The first housing comprises a first connecting member for electrically coupling the first section with an external HOST processor, a second connecting member, a physical layer processor coupled to the second connecting member, and a media access control processor coupled to the physical layer processor and the first connecting member. The second housing that is detachable to the first section and comprises a connecting member for electrically coupling the second section to the second connecting member of the first section, a circuit for converting between a baseband frequency and an RF frequency coupled to the connecting member, and an antenna coupled to the circuit for converting between the baseband frequency and an RF frequency.

By contrast, Tom, which is directed to a wireless communication system, includes a handset that is configured to receive removable cartridges, and in all of the embodiments disclosed in Tom, the cartridge has only one connector and that connector is for connecting with the handset.

In one embodiment (Fig. 3) of Tom, the removable cartridge includes the components of the digital section (control, DSP, RAM) and the RF section (RF/IF circuits) on one card. The card is a single card with only one connector and does not have any detachable sections. It only attaches/detaches with the handset. Although the card is electrically connected to an external host processor (the handset), it does not have a detachable second section that is also electrically connected to the first section that sends/receives signals via an antenna. Similarly, Figure 13 shows an embodiment with the Antenna, RF/IF system, voice processing system, and microcontrollers all located on a single cartridge that does not have any detachable sections. Thus, although the card is electrically connected to an external host processor (the handset), it does not have a detachable second section that is also electrically connected to the first section that sends/receives signals via an antenna. Figure 15 illustrates an embodiment where the RF section (antenna and RF/IF) are located on the handset (i.e. with the host processor), not on a

Appl No. 09/849,786
Amdt. dated June 10, 2005
Reply to Office action of March 11, 2005

second section of the communications module that is detachable from the first section. This embodiment teaches away from the present invention as an aspect of the present invention recited in claim 25 is that the RF section can be changed while using the same digital section – as opposed to the embodiment of Fig. 15 where the RF section is built-in (and thus can't be changed) and the digital section is interchangeable. Thus, none of these embodiments disclose a communications module with both a first (digital) section that is electrically coupled to a host and a second (RF) section that is detachable from the first section with mating electrical connectors for electrically connecting the first section with the second section. In all of these embodiments, the cartridge has only one connector and that is for connecting with the handset, whereas claim 25 recites that the first section has one connector for connecting with an external host and a second connector for connecting with the detachable second section of the communications module. As also stated hereinabove, the aforementioned deficiencies in Tom are not remedied by any teaching in the applicant's specification, or in those elements that the examiner has taken Official Notice.

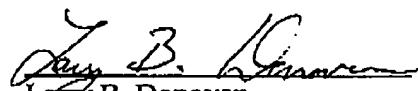
IV. Conclusion

For the reasons just set forth, the claims currently pending in this application are not anticipated nor rendered obvious by the cited prior art. If there are any other fees necessitated by the foregoing communication, please charge such fees, or credit any overpayment, to our Deposit Account No. 50-0902, referencing our Docket No. (72255/11265).

Respectfully submitted,

TUCKER ELLIS & WEST LLP

Date: June 10, 2005


Larry B. Donovan
Registration No. 47,230
Customer No. 23380
1150 Huntington Building
925 Euclid Avenue
Cleveland, Ohio 44115-1475
(216) 696-3864 (phone)
(216) 592-5009 (fax)